

---

# Lecture 26 Quiz

DAVID KIRBY

DUE: 08 MAY 2020

---

**1. Define least recently used block strategy.**

We have a choice of which entry in a set to replace on a miss. Typically, the block that was used furthest in the past is replaced. This is the *least recently used* strategy.

**2. What are the advantages of a split-cache system?**

Split caches, as opposed to unified caches, separate instructions and data, such as with Harvard architectures. An advantage of this is customization of the level cache for the given data stream (i.e. if certain techniques work really well for an instruction cache vs. data cache, we can finely tune the cache to suit that need).

**3. Describe the benefits of virtual memory.**

- Copes with small amounts of main memory, by swapping data between disk and main memory automatically,
- allows multiple processes to share resources easily,
- enables each process or program to have its own virtual view of memory, and
- provides protection between various processes and between processes and the OS.